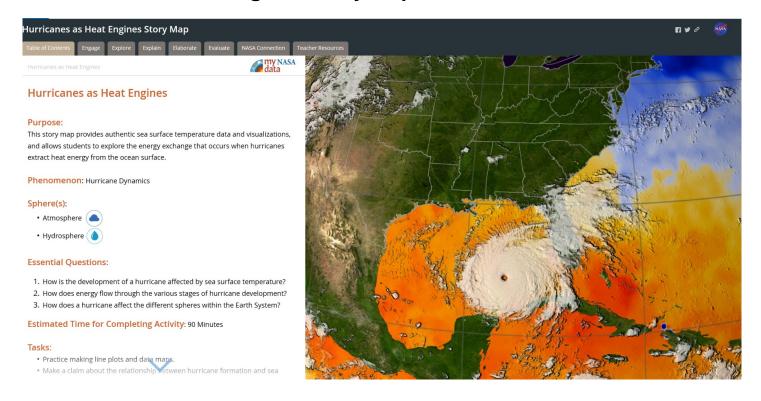
## My NASA Data - Interactive Models

# **Hurricanes as Heat Engines Story Map**



The passage of a hurricane causes a large transfer of heat between the ocean surface and the atmosphere. It also causes surface waters to diverge, bringing cooler water from below to the surface (upwelling). These effects are so large that they can be seen by a drop in sea surface temperature (SST) in satellite data observations along the path of the storm. The cooler water conditions may last for a week or longer after the storm.

**Virtual Teachers**: Make a copy of the Google Form of your choice so that you may assign it directly from your Google Drive into your Learning Management System (e.g., Google Classroom, Canvas, Schoology, etc.). Do you need help incorporating these Google Forms into your Learning

Management System? If so, read this Guide to Using Google Forms with My NASA Data.

Teachers who are interested in receiving the answer key, please complete the <u>Teacher Key Request</u> and <u>Verification Form</u>. We verify that requestors are teachers prior to sending access to the answer keys as we've had many students try to pass as teachers to gain access.

### **Grade Band**

- 6-8
- 9-12

### **Supported NGSS Performance Expectations**

- 3-ESS2-1: Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.
- 4-ESS2-2: Analyze and interpret data from maps to describe patterns of Earth's features.
- <u>5-ESS2-1</u>: Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.
- MS-ESS3-2: Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.

#### **Related Resources**

- Hurricanes as Heat Engines Story Map
- Hurricanes as Heat Engines Lesson Plan
- Instructional Strategies for the Earth Science Classroom
- Data Literacy Cube Guide